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ORIGINAL ARTICLES

THE ACUTE ABDOMEN, WITH REPORT OF CASES.*

By CHARLES O. COOKE, A. M., M. D.

Providence, R. I.

No group of cases presents a more interesting clinical picture than that which results in the acute abdomen. While the surgeon is especially interested in these conditions, it is the general practitioner who is first called and who must make a prompt and correct diagnosis. It is the intervention or institution of prompt surgical treatment that will save the lives of a vast majority of these patients. While the diagnosis in many of these diseases is easy and well understood, often times it is extremely difficult, and it has seemed worth while to present the picture of these cases before you to-night.

My interest in the acute abdomen was stimulated by the publication of four clinical lectures on this subject by Mr. William Henry Battle in the *Lancet* in 1906. Since then, the appearance of numerous articles bearing on this subject has further stimulated my interest, especially an article by Moynihan, entitled "Inaugural Symptoms," which appeared in the *British Medical Journal* for November 28, 1908.

I shall first take up a consideration of those diseases which produce the condition known as the acute abdomen. Later in this paper I shall report a series of cases which have come under my observation.

What is meant by the acute abdomen? The acute abdomen is a condition brought on by some acute process or disease in the abdomen, and which, if not promptly recognized and properly treated usually leads speedily to a fatal result. The following named diseases are the ones which we commonly see, and which produce the acute abdomen:

1. Acute gangrenous and perforative appendicitis.
2. Twisting of the pedicle of an ovarian cyst.
3. Acute gangrenous infection or perforation of the gall bladder.
4. Rupture of a gastric or duodenal ulcer.
5. Perforation of an ulcer of the small or large intestine. This includes typhoid ulcer.
6. Thrombosis of the mesenteric vessels.
7. Acute haemorrhagic pancreatitis.
8. Acute salpingitis or rupture of a pyosalpinx.
9. Inflammation of Meckel's diverticulum and diverticuli of the large intestine.
10. Acute intestinal obstruction due to impacted gall stone or other foreign body, volvulus bands or intussusception.
11. Strangulated hernia.
12. Ruptured extra uterine pregnancy.
13. Injuries to the abdomen, penetrating and non-penetrating.

Conditions which may stimulate the acute abdomen are the following:

(a) The gastric crises of tabes dorsalis.
(b) Gallstone colic.
(c) Renal colic.
(d) Perinephritic abscess.
(e) Pneumonia, especially in children.
(f) Acute septic infarct of the kidney.
(g) Dietl's crises, due to kinking of the ureter and the production of acute hydronephriosis.
(h) Pyelitis.

It will be seen from the various conditions which produce the acute abdomen that all except one, namely ruptured extra-uterine pregnancy, lead in a few hours to the condition known as peritonism, the picture of which you all know so well. The patient, so well described by Hippocrates, lies in bed with knees drawn up, the pinched, anxious expression of his face with duskey hue, nostrils dilated, respiration shallow, the rigid and distended abdomen, more or less fever, the thin, soft and rapid pulse; altogether he presents the picture of impending dissolution.

*Read before The Providence Medical Association, June 4, 1917.

Whatever may be the cause of the acute abdomen, these cases all present certain symptoms in common. The onset of the disease is almost universally ushered in with severe acute abdominal pain. This is usually followed by nausea, vomiting and fever. Very soon the abdomen becomes rigid and later distended. Examination of the blood at this time will usually show a marked leucocytosis and an increased percentage of the polynuclear cells. If the resistance of the patient is poor, there will be little if any increase in the number of leucocytes. The polynuclear cells will in my experience always be relatively increased, varying from 80 to 95 per cent. A high absolute leucocyte count indicates good resistance. A high relative polynuclear count always indicates a severe lesion. A low leucocyte count with a high relative polynuclear count always indicates a severe lesion and poor prognosis, and vice versa.

In making a diagnosis of the acute abdomen, a careful history taking is of the utmost value. The patient should be allowed to tell the story of his illness in his own words, uncolored by the questions of the physician. Only in this way can a correct opinion of the diseased condition be obtained. After the history has been taken, a careful general physical examination should be made. We are all too prone to examine the abdomen alone and neglect the complete examination. This often leads to errors in diagnosis and to needless operation. Many a case of frank pneumonia has been submitted to needless abdominal operation, due to failure to examine the chest, and not a few cases of gastric crises have been operated futilely due to failure to examine the reflexes. I recall very vividly one case of angina pectoris operated needlessly for supposed gallstones, due to failure to examine the heart. Furthermore, many healthy appendices have been removed due to failure to examine the urine, which would have given a clue to the presence of a renal calculus or a pyelitis.

After the general physical examination has been made, special attention should be directed to the abdomen. The abdomen should always be bared. It should then be first inspected. It should be noted whether the respiration is deep or shallow. Irritation or discoloration of the skin may give a clue as to the location of the pain due to the application of counter-irritants. The abdomen should next be carefully palpated, general or localized rigidity noted, and the presence or absence of definite masses or tumors noted. The location of the maximum tenderness should be determined, as this may give a clue as to the location of the lesion. After palpation, the abdomen should be carefully percussed to determine areas of dullness. Careful percussion of the flanks should be done to determine the presence or absence of free fluid. Auscultation may be of some value to determine the presence or absence of peristalus.

As a general rule, in women a vaginal examination should always be made. Failure to do this may lead to an error in diagnosis. It is unwise to open the abdomen during an acute attack of salpingitis. These cases do better if allowed to quiet down and operation performed during the quiescent period.

A rectal examination may be of great value. The presence or absence of an intussusception can usually be determined, also the presence of a fecal impaction which may simulate a mechanical obstruction. Pelvic abscesses can often be felt by rectal examination.

The temperature pulse and respiration should be carefully recorded. The blood pressure should always be taken. In one case, which I shall report later in this paper, a low systolic blood pressure gave the only clue to the real condition of internal haemorrhage due to a ruptured extrauterine pregnancy in a woman forty-three years of age.

The leucocytes should be carefully counted and the percentage of polynuclear cells carefully estimated. In obscure cases these counts alone may decide as to the expediency of immediate operation. Consequently they should be carefully done. An average should be taken from three different drops from the pipette and from six to nine large squares on the counting slide should be counted. These counts can be accurately and quickly done, using the two-thirds objective for the absolute count and the one-sixth or one-fifth objective for the polynuclear count on the counting slide.

As before stated, the urine should be examined in every case. It may give valuable evidence which can be obtained in no other way. In women a catheter specimen should always be obtained.

The Diagnosis of Appendicitis.—Pain is the inaugral symptom. The onset of the disease is almost always ushered in with severe abdominal pain. The diagnosis must be viewed with sus-

picion if pain is not the initial symptom. The patient, previously in good health, is seized with severe abdominal pain. The pain is often at first referred to the epigastrium or it may be general over the whole abdomen. The pain is usually followed by nausea or vomiting. In a few hours the pain localizes in the right iliac fossa and the patient is exquisitely tender in this location. The temperature is slightly elevated or normal. The pulse may be normal, but is usually accelerated. On palpation the abdomen is held rigid, the breathing is shallow and the abdominal wall does not move on respiration. There is marked rigidity of the right rectus muscle and there is localized tenderness over McBurney's point. Constipation is usually present, diarrhea occasionally. Bladder symptoms may be present when the appendix is long and hangs over the pelvic brim. The pain and tenderness are occasionally referred to the left side or they may be referred high up on the right side when the appendix is retrocecal extending towards the liver.

The severest types of appendicitis occasionally present the mildest symptoms. It is in these cases that the blood examination is especially valuable. With a normal white count that is up to 10,000 leucocytes, if an inflammatory process exists, there will be an increase in the percentage of polynuclear cells to at least 80 per cent. In regard to the treatment of the acute appendix, it must be admitted that many of these cases will recover from the first attack without operation. Some never have a second attack. Others become chronic invalids and suffer recurrent attacks. Still others are stricken with a second attack severer than the first. It is impossible to foretell the result in a given case. I believe we shall save the greatest number of cases by prompt operation within the first twenty-four hours as soon as the diagnosis is established.

Diagnosis of Perforated Gastric or Duodenal Ulcer.—The patient is seized with excruciating pain in the epigastrium, followed by vomiting. The temperature is not elevated at first. The pulse is at first accelerated and then returns nearly to normal. The upper abdomen has a boardlike rigidity. The breathing is shallow and catchy, the expression drawn and anxious. There is no distension at this time. If the previous history be inquired into, there is usually a history of long continued indigestion with classical symptoms of gastric or duodenal ulcer. Now is the golden time to operate and save the patient's life. The abdomen is opened above the umbilicus and the perforation closed and the abdomen drained. We should not wait for distension, acceleration of pulse and increased temperature. When these appear, peritonitis has set in and valuable time has been lost.

Time will not permit me to consider in detail the symptoms and signs of all the diseases or conditions which may produce the acute abdomen. Nor is it perhaps desirable to consider symptoms and signs as such. I shall now report a series of cases which have come under my observation many of which presented difficulties in the way of diagnosis and all of which were proved at operation to be suffering from a serious disease which had produced the acute abdomen.

Case I. Acute Ulcerative Appendicitis. Patient, F. W., male, age 34, on May 28, 1917, at 7 a. m., was seized suddenly with general abdominal cramps, followed by vomiting. At 11 a m. the pain and tenderness localized in the right iliac fossa. Temperature at 2 p. m. was 98 degrees, pulse 90 and respiration 24. Leucocytes 20,000. Operation at 4 p. m. The appendix was much swollen, tense and on section was full of faecal material and pus. The mucous membrane was ulcerated. The incision was closed without drainage. Convalescence was uninterrupted.

Case II. Acute Ulcerative Appendicitis with Abscess.—Patient, E. S., female, age 39, seen May 14, 1917, with a history of severe pain in right lower quadrant for the past 8 or 10 hours and a history of vomiting several times. Temperature was 100.4 degrees, pulse 118, respiration 28. Examination showed rigidity of the right rectus muscle and exquisite tenderness over McBurney's point. Inasmuch as the patient was also suffering from acute laryngitis, the operation was started under one-half per cent. novocain. As soon as the peritoneum was opened, the patient became hysterical and it was necessary to administer ether. The operation was finally completed under nitrous oxide and oxygen anaesthesia. The appendix was perforated with an abscess between the appendix and caecum. One cigarette drain was inserted to the pelvis. Convalescence was uneventful.

Case III. Acute Gangrenous Appendicitis with Spreading Peritonitis.—The patient, a

woman 40 years of age, married, was taken sick suddenly while sea bathing with severe abdominal pain, followed by nausea and vomiting and slight fever, 100 degrees. Bowels, usually regular, were constipated. There was no history of previous attacks nor of chronic indigestion. During the afternoon the patient had chilly feelings and the pain localized in the right side. Physical examination twelve hours after onset. The abdomen was not rigid and was not distended. There was dullness on percussion and exquisite tenderness at McBurney's point. Slight rigidity of the right rectus muscle. Temperature 99 degrees, pulse 72. Vaginal examination showed the uterus slightly enlarged, in good position and freely movable. The appendages were not felt. The tenderness over McBurney's point was not associated with the right appendages.

The patient passed a comfortable night and the next morning said she felt much better. Temperature was 99.2 degrees and pulse was 80. There was very little tenderness or rigidity of the abdomen. On deep palpation over the appendix, the patient was thrown into a violent spasm of pain, requiring morphia to relieve. An immediate abdominal section was performed. On opening the peritoneum, turbid fluid escaped with the typical colon pus odor. The appendix was found gangrenous in its whole length. The abdomen was drained. The patient recovered after a stormy convalescence.

Case IV. Perforation of a Duodenal Ulcer—The patient, A. B., age 29, male, was seized at midnight on May 29, 1917, with terrible agonizing pain in the epigastrium, followed by vomiting. He was seen by a physician, who gave him morphine and sent him to the hospital in the morning. On admission to the hospital his temperature was 99.6 degrees, pulse 135 and respiration 28. His leucocytes were 20,000. His expression was pinched and anxious. The abdomen showed boardlike rigidity, with exquisite tenderness everywhere. There was shifting dullness in the flanks. His skin was cyanotic. Altogether he presented the picture of impending dissolution. At operation a perforated duodenal ulcer was readily found. The perforation was closed and the abdomen freely drained. Intravenous saline 900 c.c. was given during the operation. Convalescence was uneventful.

Case V. Acute Gangrenous Infection of the Gall Bladder with spreading peritonitis. Stone impacted in the cystic duct. The patient, a woman some fifty years of age, was seized while traveling on a train with sudden severe pain beneath the right costal margin, followed by nausea, distension and chilly feelings. She returned home immediately, went to bed with a hot water bottle, started on calomel and called a physician. She had been operated elsewhere some two and one-half years before for gallstones and stated that twenty-five gallstones were removed and the gall bladder drained. Since the operation she has had two severe attacks of gallstone colic, accompanied by fever and severe prostration. Physical examination eight hours after onset. Patient was lying in bed with an anxious expression, knees drawn up and groaning with pain. There was marked tenderness below the right costal margin over the scar of previous operation. There was also present in this region a well marked mass, very tender and dull on percussion. Temperature was 98 degrees and pulse 78. A diagnosis of stone impacted in the cystic duct was readily made and operation advised. The patient passed a poor night, and the next morning was cold and clammy. Pulse was 108. There was no change in the abdominal condition. Patient was seen in the afternoon and looked better. Temperature was 99.8 degrees and pulse was 108. The blood pressure was 110 mm. The leucocytes were 29,400 and the polynuclears were 70%. There was no change in the abdominal picture. During the evening patient began regurgitating mucous and complained of pain in left side of epigastrium. Operation was performed the next morning, forty hours after onset. The gall bladder was found gangrenous and a stone was found firmly impacted in the cystic duct. The gall bladder and liver were covered with a thick fibrinous exudate. A culture taken from the peritoneal cavity showed the colon bacillus. The patient did not rally after the operation and died.

Case VI. Ovarian cyst with a twisted pedicle five months' pregnancy. The patient was a young woman about 26 years of age and was in the fifth month of pregnancy. She was taken sick two days previous to operation with sharp abdominal pain below the right costal margin. During these two days there was absence of fever and the pulse was normal. On the morning of the third day she suddenly became very sick. She became feverish, expression was anxious and

pulse rose to 108. During the past two years she had been repeatedly examined by her physician and no abnormality was noted in the pelvis except a retroversion. When seen by me on the morning of operation, the patient appeared very sick. The face was drawn and expression anxious. Temperature was 101 degrees and pulse was 108. Leucocytes were 19,000 and polynuclears were 90 per cent. Examination of the abdomen revealed the uterus size of five months' pregnancy. In the upper right quadrant of the abdomen was a large tender mass size of a large grape fruit, dull on percussion. Immediate abdominal section was performed. A cyst the size of a large grape fruit was found lying in the right upper quadrant with two complete twists in the pedicle which lead to the right horn of the uterus. The fallopian tube was gangrenous. The pedicle was ligated and cyst removed. The abdomen was closed without drainage. The patient made an uninterrupted recovery and pregnancy was completed at full term.

CASE VII. Ruptured Extra Uterine Pregnancy.—The patient, M. M., a woman, age 43, was taken sick suddenly on October 12, 1914, with a sudden lancinating pain in both flanks, radiating towards the symphysis. The pain continued during the day and the abdomen became distended. There was no vomiting. There was no bleeding from the vagina. Menstruation had always been regular, the date of the last period being September 19, 1914. She entered the hospital the following day. The temperature was 97 degrees, pulse 132, respiration 36. The syslotic blood pressure was 88. The leucocytes were 27,400 and the polynuclears were 81 per cent. The abdomen was greatly distended, but there was no rigidity. There was shifting dullness in both flanks. Tenderness was most marked in the epigastrium and the right lower quadrant. At operation a ruptured extra-uterine pregnancy was found with the abdomen filled with blood. The patient did not rally from the operation and soon died.

CASE VIII. Acute Perforation of the Intestine with General Peritonitis.—The patient, J. R., male, age 40, fell about four feet across a sawhorse on May 12, 1917. He entered the hospital the following day. His temperature was 101 degrees, pulse 120, and respiration 28. His leucocytes were 15,000. The abdomen showed boardlike rigidity, with exquisite tenderness everywhere and shifting dullness in the flanks. At operation 12 hours after the fall, the abdomen was filled with thin faecal brownish fluid and pus. The intestines were intensely injected and covered with a plastic exudate. Prolonged search of the intestines failed to reveal the exact location of the perforation, which was evidently covered with plastic exudate. The appendix was removed. Three cigarette drains were inserted to the pelvis. Convalescence was uninterrupted.

CONCLUSION. Every patient suffering from acute, sudden abdominal pain should be given a special study. The acute abdomen must be suspected in every case and proved or disproved. If the acute abdomen is present, an effort should be made to make the diagnosis of the cause of the condition. Much valuable time will be saved in the operation if the diagnosis can be accurately established beforehand. Morphine should not be given to relieve symptoms. It is a dangerous procedure, always masks symptoms, and should never be given until a definite procedure has been decided upon. Cathartics should not be given. They stir up peristalsis, spread the infection over the peritoneum and often cause perforation of the appendix or other viscus. If doubt exists as to whether the acute abdomen is present or not, that doubt should be cleared up by operation and not by delay. The mortality of the acute abdomen is the mortality of delay, ignorance and neglect. A diagnosis of acute abdomen having been established, the treatment is immediate abdominal section. This offers the greatest opportunity for recovery. The earlier the diagnosis can be established the greater are the chances of recovery.

ADULT RECTAL PROLAPSE: TWO CASES AND A CONTRAST.*

RALPH W. JACKSON, M. D., F. A. C. S.,
Fall River, Mass.

One finds on reviewing the Transactions of this Society since first published in 1908, the preceding programs not being available, practically only one paper touching at length on the major types of rectal prolapse in adults. This is surely not so infrequent a pathological condition that it deserves no more consideration at our hands; and, even if that were true, it is sufficiently rebellious

*Read before the American Proctologic Society, June, 4, 1917.

to treatment, when it does occur, to make up in interest for any lack of frequency. It has had greater attention in recent years from men not professing to be proctologists.

Numerous works on rectal disease, a half dozen of them by present or past members of our Society, and other medical literature propose a bewildering array of anal narrowings and wirings, rectal amputations, plications and pexies, infra-pelvic and supra-pelvic, for the cure of prolapse. Often the writer is unsatisfyingly vague and non-committal as to what he himself considers the best therapy, to say nothing of his non-coincidence with other authorities. The experience and studies of proctologists ought to go further than that of others in giving us a generally acceptable line of attack on this very troublesome disorder.

In this belief, I hope not with limited experience to settle mooted points, but rather to arouse in discussion enough comment and criticism, adverse or otherwise, from those of greater experience, to go some way toward the desired goal. Two sharply contrasting cases, in some detail, will serve to bring out the points and the reasons for certain views that will be stated in conclusion.

Case 1. First seen June, 1914. Mrs. S. L., housekeeper and mill operative, was a fairly well developed woman, had had very little general sickness, but two confinements, which she said were normal, and one miscarriage, and catamenia O. K. No marked uterine displacement. Rectal trouble had been present only one year and was markedly progressive. Prolapse was constant when she was on her feet, and, when reduced, would only stay a short time. There was bleeding and slimy discharge and much aching and pain. Examination showed a prolapse as large as a good-sized orange, with the typical concentric rugae and surrounded by a sulcus at the anal margin, and the sphincters were so atrophied by the constant divulsion that they were not much in evidence. At once a very generous regional cauterization was done with the clamp, to contract the anus, and the patient kept in the dorsal position for some time. Very temporary relief was obtained, and in October I did the Tuttle operation, through a retro-anal incision freeing the rectum from the sacral hollow and laterally, bringing it down through the incision, and plicating it with silk worm gut sutures, which were then passed out around the sacrum and tied, i. e., a sacral suspension. The results of this procedure were scarcely more satisfactory, and early recurrence differed only from the previous prolapse in that the posterior wall was better supported, and in December I amputated the whole protrusion. This operation was done without incident except opening the peritoneal cul de sac. This was not closed, but, after all the sutures were placed, was drained anteriorly by one wick for forty-eight hours. After a week of absolute tying up of the bowels, the whole healed with as near primary union as is ever possible to get in this locality. The redundant gut had been removed, the anus was distinctly narrowed, the sphincters rebounded well and she had no further rectal prolapse. But the cul de sac was not obliterated and the contained coils of intestine promptly turned forward and produced a perfectly enormous hernia of the posterior vaginal wall through the vulva. Finally, in July, 1916, I opened the abdomen, and by the Moschowitz method of successive circular sutures closed the sac and thus excluded the intestine. Further, the longitudinal band of the sigmoid was sewn to the posterior aspect of the uterus and a ventro-fixation done, a valuable additional safeguard against return of the trouble. Her condition is now one of entire relief, which she cannot enjoy to the utmost because of the work which her circumstances force upon her. A rather long story, and how different from the next.

Case 2. First seen May, 1916. Mrs. H. T., housekeeper, was a thin, stooped, semi-decrepit woman as the result of a lifetime of hard work, had had eight confinements and menopause when 38 to 40 years old. Some downward displacement of uterus. Had bleeding piles at times for years, and present persistent and progressive prolapse for nine or ten months, which was reducible, but would not stay at all. There was not much bleeding, but pain and fecal incontinence. Examination showed a prolapse about the size and appearance of the other case except there was not the sulcus at the anal margain and the sphincters were atrophied beyond the point of recognition. The ischio rectal fossae were almost devoid of fat and the levators flabby and inadequate, all to correspond with the general emaciation and muscular degeneration. She was a woman actually much older than her years, and

a more unfavorable subject could hardly have been found for the Moschowitz operation and suspension which I did on her ten days later. The relief was immediate to at least one, and that was the most annoying of the poor old woman's infirmities, though its entire permanency may not be as certain because of the refusal of the sphincters to rebound and the lack of peri-anal muscular and adipose support.

Here are two cases, and of the first you will be tempted to say "that woman has had her share." Right, she has, and most of it might have been avoided had I then been as convinced as I am now that the hernial theory, while not by any means explaining the whole etiology of major rectal prolapse, yet points the way toward the most rational treatment of it. But the woman is alive, cured and grateful, quite enough to disarm serious criticism. In sharp contrast with this is the second, cured by only one operation, and grateful, but more justifiably so, if she only knew it, because of having reached the same goal with so much less effort.

The competency of the pelvic floor as a support for the overlying viscera would seem to depend on the sufficiency of four factors: 1, The pelvic fascia. 2. The levator ani muscle. 3. The muscular and fibrous elements, guarding the openings through the two foregoing structures. 4. The fat beneath and around the three foregoing structures.

The pelvic fascia is differently described by different writers, but we may weed out some fairly indisputable facts. It is continuous from the pelvic brim, with the fascia elsewhere subluing the peritoneum. It is not an unbroken structure, but distinct prolongations invest and form the chief supports of the bladder, uterus, cervix and rectum. The point of its rectal attachment is an inconstant one, thereby varying the normal depth of the cul de sac. It is subject, like the structures beneath, to atrophic changes, dependant upon trauma and general health conditions, with consequent relaxation and abnormal depth of the sac. Furthermore, while usually a structure of much strength, it may be almost nonexistent congenitally and thereby be a potential cause of trouble.

Beneath the fascia at an appreciable distance are the levators, voluntary muscles of great importance, anteriorly converging from the arcus tendineus on either side to a mid-line union behind the rectum and probably the vagina, and by their contraction not only lifting the pelvic floor, but closing the rectum and vagina through approximation of their walls. The value of this approximation is considerable for the anus, but greater for the vagina, since, in the erect position, that is the most dependant part of the pelvis, whither all the contents tend to gravitate.

This pelvic diaphragm of fascia and muscle would be perfect enough support were it not rendered defective by the openings which nature demands for excretion and reproduction. The anal and vaginal orifices are guarded by the anal sphincters, the peri-vulvar muscular elements of somewhat similar function, an intact perineum and the just mentioned levator action. Of the two the guarding of the anus is undoubtedly more adequate and is favored by the fact that, in the erect position, it is the less dependant part. But inadequacy of any of these structures, whether from trauma or disease, spells descensus of some of the organs above. Rectal and vaginal prolapse are related in cause and often coincident. From the evident greater possibility of injury to the pelvic floor in females, one naturally and rightly infers that prolapse per anum is more common in that sex.

Not enough stress has been laid on the fact that this floor itself normally has and needs support. A plentiful supply of fat in the meshes of the connective tissue of the ischio-rectal fossae forms a cushion for its support and compresses and supports the anal canal. A deficiency of fat favors sagging of the diaphragm and relaxation of the anal canal. Of this last no better proof need be given than the much better anal control which one gets in the stout, muscular patient than in the thin, emaciated one, where the sphincters have been much incised necessarily to cure fistula. Restoration of lost fat, as well as of muscular tone, aids the cure and prevention of recurrence of a rectal prolapse.

Above the pelvic floor the rectum emerges a soft-walled, distensible and rather mobile viscus, and most poorly supported considering the resistance it must constantly offer to the downward pressure, internally of its fecal contents, and externally, and more important, of the two often ptotic intestines in the peritoneal cul de sac. Posteriorly the attachment of the rectum is imperfect to the sacral hollow, laterally consists only of loose cellular tissue and anteriorly is nil,

and this is usually fully half the circumference of the organ. Right here is nature's weak point, and the weakness increases the lower the point of the peritoneal reflection, i. e., the deeper the sac.

Cases of major rectal prolapse may begin from this point as a hernia into the rectum, gradually dragging in the lateral and then the posterior walls, and finally protruding through the anus; or may begin as a protrusion of the anal mucosa, gradually dragging down all the coats till they appear through the anus; but eventually there will be found in the anterior part of the protrusion the same peritoneal sac and contents in the latter as in the former incidence. The complete obliteration of this sac and exclusion of the contained intestine is a most important factor in the cure of the disease.

The first operation on Case 1, extensive regionally cauterization, though superior to any linear burning, may be dismissed briefly. It was too puny a procedure to be efficient against so great a prolapse, and was even contra-indicated because, as shown by the marginal sulcus, this case did not begin as an anal prolapse, but was primarily a hernial intussception from above. The operation ought not to have been attempted.

The second operation in Case 1, sacral fixation, failed for the same reason that Jones assigned in his recent admirable paper (*Bost. Ned. and Surg. Journal,* November 2, 1916). The relapses that followed the posterior recto-pexies of himself and others had led him to believe that in most cases it is an ill-conceived operation. Theoretically it depends on suspension of the rectum to the sacrum and on the cicatricial adhesions which are to form wherever the viscus has been separated from the adjacent structure. But it only reinforces the supports which need it least and does nothing for that portion of the rectum which has no support at all, viz., the anterior wall. Still less likely to succeed in cases of any size is the method where no perisacral sutures are used, but entire dependence placed on packing, wound granulation and adhesions. Though Mummery (Dis. of Rectum and Anus, p. 122), claims much for this, I am certain that most operators do not attain the same success.

The third operation on Case 1, amputation of the protrusion, need not be, with proper technique, the formidable procedure described by many with such terrors of hemorrhage and peritoneal sepsis. The encircling tape suggested by Lynch (Dis. of Rectum and Colon, p. 272), materially lessens the former. In regard to the latter, it is almost inevitable that the peritoneal pouch will be opened, and I do not believe that it should be closed absolutely, but rather that it should be temporarily drained and that the danger will be less in that way because of the impossibility of perfect sterilization for any operation in this field. The results so far as the descensus through the anus were admirable in Case 1, but the peritoneal pouch was still left as low at least as the perineal body, and the contained bowel, finding its previous line of least resistance barred to it, took the next course and pushed its way through the birth canal fault in the pelvic floor. From such a sequence as this of course the other sex would be immune.

The fourth operation on Case 1, obliteration of the peritoneal pouch, promptly put an end to the vaginal hernia, because it closed the hernial sac, which it would have done when that sac was an anal and not a vaginal protrusion, and which it did do in the one operation in Case 2. While similar ideas of the surgical therapy of rectal prolapse had been advanced by German and French writers, it remained for Moschowitz to publish (Sur. Gyn. & Obs., July, 1912), such a logical and convincingly argued and illustrated article as none too often appears in medical print. The operation is often extremely difficult. The cul de sac in any patient is deep enough to make work at the bottom of it hard; but, when it has extended for years as a hernial sac through the rectum to or beyond the perineum, it has attained a depth much greater than normal and makes the work proportionately more difficult. Special long instruments greatly facilitate it, and an exaggerated Trendelenberg position must be used to bring the fundus of the sac, the rectum and the other pelvic contents as near as may be to the generous abdominal incision. The danger of damage to the ureters and pelvic vessels is considerable and not to be overlooked.

While the Moschowitz operation prevents the downward push of the intestines and fairly supports the anterior rectal wall, I do not believe it is ever superfluous to reinforce the support, while the abdomen is open, by every other possible means. To this end the sigmoido-utero-ventral wall pexy is the strongest line of suspension that can be built up in a female. Since in males relapse

cannot occur through a vagina, but only through the anus, while there might not seem so much necessity of the additional support, it is still advisable and harmless to do some type of sigmoidopexy.

It was said that in Case B the prognosis was not as certain. If in that type of case there should be recurrence through the inability of the pelvic floor, because of stretching, atrophy or trauma of any or all its four elements of competency, to support what redundancy of the rectal wall the abdominal operations have not removed, then what should be done? It rests between some form of plastic work, perineal sphincteric, etc., or removal of the redundancy, i. e., amputation. The plastic work is none too satisfactory on such weakened structures, and I believe would generally be less satisfactory than amputation, which operation would now be robbed of any danger of peritoneal infection because of the previous closure of the cul de sac, and may be easily relieved of serious danger of hemorrhage. Then, with all protrusion removed, the sphincters and other muscles have their best chance to reassert themselves, and, failing to do so, may be repaired.

Such prolapses as we have been considering make life well nigh unbearable for the victim, whether male or female, and are comparable only to complete uterine prolapse. Only heroic surgery gives relief, and in summary I am inclined to assert that the operation of first choice for the major types of rectal prolapse in adults is cul de sac closure plus suspension, to be followed and supplemented, if need be, later by amputation and perhaps some plastic work on the elements of the pelvic floor.

OBSERVATION ON DIASTOLIC BLOOD PRESSURE.*

By Otto A. Faust, M. D.,
Providence, R. I.

It was only thirteen years ago that the first paper on human blood pressure was read by Richard Cabot of Boston. In the ensuing brief space of time there has grown up a vast literature on the subject now numbering thousands of published articles and the sphygmomanometer has taken its place in the diagnosis, prognosis and treatment of disease.

In the words of Nicholson, "The more recent graduates and certainly all up-to-date clinicians now make frequent observations of the systolic blood pressure." Unfortunately, however, his further statement is true also, "but comparatively few estimate the diastolic pressure and of this number many fail to understand the significance of their observations." Even so keen an observer as Theodore C. Janeway in a recent paper on "The Clinical Study of Hypertensive Cardio-vascular Disease" makes no mention of the value of diastolic blood pressure readings. The literature, therefore, on the subject is meagre. A few extracts from recent clinical contributions to this meagre literature may serve to place the diastolic blood pressure in a new light.

W. J. Stone in a paper in the Archives of Internal Medicine for November, 1915, says:

"Since diastolic pressure represents the constant pressure between systoles, it is a better index of peripheral resistance and hypertension than systolic pressure. A sustained diastolic pressure of 105 or 110 or above signifies hypertension irrespective of the height of systolic pressure. The diastolic pressure is less affected by physiological factors than the systolic pressure."

Approximately these same views are stated by Warfield: "Diastolic pressure is probably the most important feature in blood pressure readings. It is not the constant high systolic pressure which is most important but the gradually ascending or high diastolic pressure. Diastolic pressure measures the resistance the heart has to overcome, the work lost, so to speak, before it can possibly carry on any circulation."

With the above facts in mind, I was stimulated to the following brief study of the subject. The material was gathered from the hospital records of sixty-one cases selected from 1822 medical admissions between January 1 and December 1, 1916, being those cases of chronic nephropathies and cardiopathies on whom at least one blood pressure reading and one phthalein renal test was made. Nine cases of aortic regurgitation were also collected. All blood pressure readings were made

*Read before the Rhode Island Hospital Club, June 27, 1917

with a Tycos instrument by the auscultatory method, the criterion used for determination of the true diastolic pressure, being the so-called third tone phase. Where more than one reading had been made on either blood pressure or phthalein output the readings were jotted down and the average of them recorded. Only summarized results will be reported here.

Table I was designed to show the value, if any exists, of diastolic pressure in relation to phthalein output. Brief study of it, though the recorded cases are few in number, brings out these facts:

1. That with the gradual drop in functional output there is no corresponding gradual rise in systolic pressure.

2. On the other hand the gradual rise in diastolic pressure is accompanied roughly by a gradual fall in functional output.

Table II shows graphically those unquestionable cases of aortic regurgitation. In 1908 Hill and Flack first recorded the fact that in aortic regurgitation the systolic pressure in the legs is higher than in the arms, sometimes to an astonishing degree. This fact is verified on our nine cases recorded. In no case was the difference less than 35 m.m. of mercury. In normal individuals there is little or no difference between arm and leg readings. Another fact is noted, the extremely low diastolic pressure a functionally impaired kidney.

2. In cases of aortic regurgitation there is a low diastolic pressure and a marked difference in systolic pressure in the arm and leg, that in the leg being higher.

From the above study it would seem that we are justified in drawing the following tentative conclusions:

1. There is a definite relationship between diastolic pressure and functional capacity of the kidney; as the diastolic pressure rises above 100 the functional output drops, i. e., a low or normal diastolic pressure generally means a functionally good kidney, and a high diastolic pressure in each case, agreeing with Cadbury's findings at the Peter Bent Brigham Hospital.

TABLE I.

Diastolic Pressure	Average Systolic Pressure in m.m.	Average % of Phthalein	Number of Cases
Under 81 m. m.	125	62	10
81 — 90 " "	139	51	14
91 — 100 " "	186	43	4
101 — 110 " "	172	35	9
111 — 120 " "	181	31	6
121 — 130 " "	182	0	1
131 — 140 " "	183	23	2
141 — 190 " "	200	31	6

TABLE II.

AORTIC REGURGITATION.

	Systolic Leg	Systolic Arm	Diff.	Diastolic Arm
T.	180	110	70	25
J. K.	235	178	57	50
J. P.	260	160	100	?
S.	185	130	55	45
H. B	200	140	60	40
A. G.	150	115	35	55
M. G.		180		55
A. C.	300	180	120	50
C. F.	275	195	80	80

HONOR ROLL.

In order that the twenty thousand physicians needed for service shall be speedily obtained, it is urged that every physician in Rhode Island, eligible for service, shall give the matter his serious consideration. The authorities at Washington consider the present enrollment from Rhode Island much too small. It is appreciated that the civil population must not be deprived of necessary medical care any more than the military branches. Many men have volunteered to remain at home to minister to the local community

and carry on the work of the charity hospitals who would gladly have offered their services to the country in other circumstances. For them these words are not intended. But there is still an opportunity for further enlistment by physicians in this state without jeopardizing the interests of the civil population.

The following is a list of Rhode Island physicians who have accepted commissions in the Medical Reserve Corps, United States Army, or in the United States Naval Reserve Force, or in the Rhode Island National Guard, now a part of the regular forces. The JOURNAL will publish each month the names of those who have enlisted during the preceding month.

Lieut. Paul Appleton, R. I. N. G.
Capt. Herbert H. Armington, R. I. N. G.
Lieut. (Junior Grade) Albert A. Barrows, U. S. N. R. F.
Lieut. Cornelius J. Barry, M. R. C., U. S. A.
Lieut. Thomas F. Baxter, M. R. C., U. S. A.
Lieut. Francis H. Beckett, M. R. C., U. S. A.
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Lieut. Byron J. Brown, M. R. C., U. S. A.
Lieut. (Senior Grade) William H. Buffum, U. S. N. R. F.
Lieut. (Junior Grade) Alex M. Burgess, U. S. N. R. F.
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Lieut. Bertram H. Buxton, R. I. N. G.
Lieut. John Champlin, M. R. C., U. S. A.
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Capt. Murray S. Danforth, M. R. C., U. S. A.
Lieut. Seth DeBlois, M. R. C., U. S. A.
Lieut. Commander Halsey DeWolf, U. S. N. R. F.
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Lieut. Edgar F. Hamlin, M. R. C., U. S. A.
Lieut. (Senior Grade) Roland Hammond, U. S. N. R. F.
Lieut. (Junior Grade) Frederick V. Hussey, U. S. N. R. F.
Lieut. Charles H. Holt, M. R. C., U. S. A.
Lieut. Harmon P. B. Jordan, M. R. C., U. S. A.
Major John W. Keefe, M. R. C., U. S. A.
Lieut. Jacob S. Kelley, M. R. C., U. S. A.
Lieut. Peter L. S. Keough, M. R. C., U. S. A.
Lieut. (Senior Grade) Lucius C. Kingman, U. S. N. R. F.
Lieut. Patrick J. Manning, M. R. C., U. S. A.
Lieut. Commander George A. Matteson, U. S. N. R. F.
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Lieut. (Junior Grade) Joseph C. O'Connell, U. S. N. R. F.
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Capt. Roswell S. Wilcox, M. R. C., U. S. A.

ABROGATE THE PATENT ON SALVARSAN.

This patent should be abrogated, not alone because the patentees have not supplied the demand, not alone because they have dictated to the medical profession who should have the drug and how much a physician might have, not alone because of the war with Germany, not alone because of the special needs of the government at this time for the control of venereal diseases, not alone because, as some claim, the patent at Washington does not correctly describe the product, but also because the people who are supplying this product are charging prices that are exorbitant compared to the price at which others in this country can supply it. The fact is that the salvarsan one can obtain today costs $4.50 per ampule of 0.6 gram, whereas the same dose of arsenobenzol—a preparation identical with if not better than salvarsan—costs $2.00 at retail, and as Dr. Schamberg says: "If we are permitted to continue marketing the same drug after the war, we can sell it at $1.00 or less per tube." To abrogate this patent would be doing an injury to no one. Certainly the patentees of salvarsan have already reaped their harvest—and a pretty rich one. The supply of salvarsan at a reasonable price in proportion to its actual cost of production is in the interest of the health of the entire population of the country, whereas to let matters rest as they are, is to the benefit of one man. While we are emphasizing here the cost, there is after all a greater question, and that is the supply necessary to help control the ravages of one of the most serious diseases which afflict humanity today. It is the duty of Congress to abrogate the patent on this preparation and, incidentally, on all medicinal preparations of importance.—*Journal of the American Medical Association,* April 21, 1917.

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ROLAND HAMMOND, M.D., *Editor*
266 Benefit Street, Providence, R. I.

J. F. HAWKINS, M.D.
Business Manager
114 Westminster Street
Providence, R. I.

ALEX M. BURGESS, M.D.
JOHN E. DONLEY, M.D.
J. W. LEECH, M.D.
F. T. ROGERS, M.D.
Associate Editors

Committee on Publication: ROLAND HAMMOND, M.D., *Chairman*; J. F. HAWKINS, M.D.; W. A. RISK, M.D.; JOHN CHAMPLIN, M.D.; J. W. LEECH, M.D.

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EDITORIALS

MILITARY RANK FOR MEDICAL MEN IN THE ARMY.

Every war brings its blunders and mistakes both on the firing line and in the care of the sick and wounded. In recent wars the blunders which have caused the greatest loss of life have resulted from unsanitary conditions of camp and field life or from inadequate equipment provided for the medical corps both in men and supplies. The present war is no exception to the rule. On account of the comparatively low rank held by medical officers, as compared with those of the line, the advice and opinions of military surgeons do not carry the weight which they deserve. The large mortality from typhoid fever in the Spanish-American war, and the tragic history of the recent Mesopotamia campaign of the present war, are traceable to lack of coördination and coöperation between the medical staff and military officers. In every instance where the medical departments have proved deficient, they have been made the scapegoat, although their vigorous protests against the prevailing unsatisfactory conditions have been received with little less than scorn. In many instances they have been dubbed

faddists. The remedy lies in giving the medical service rank and authority equal to that of the line officers. They should be made, as far as possible, independent in all matters relating to the health of troops and especially to the care of the sick and wounded.

To this end an important bill is now pending in Congress. This bill has been approved by the Committee on Legislation of the General Medical Board of the Council of National Defense, and if enacted into law will be of particular benefit to our soldiers, as well as to the medical profession. The bill is:—

Amendment proposed by Mr. Owen to Senate Bill, 1786, 65th Congress, First Session. This amendment provides for military rank among medical officers of the Army commensurate with such rank as is already provided for medical officers of the Navy and appropriate to the dignity and importance of the Medical Corps.

This bill touches the medical patriotism of the entire profession. If it becomes a law it will be a most significant advance toward the proper recognition of the profession and of its sacrifices in the present war. It means higher compensation to the doctor in terms of dignity and of honor in the Regular Army, in the National Army and in the public mind. It extends commissions to that of Lieutenant Colonels, Colonels, Brigadier Generals and Major Generals. This recognition will make the service more attractive to the medical man, as he may then attain that commission and honor for which his special qualifications may fit him.

The State Committee of the Council of National Defense earnestly desire that every physician in the state communicate, at once, with our Senators and Representatives from Rhode Island in strong support of the bill. The united effort of the profession will have great weight in helping to bring about the enactment of this law which so directly affects the welfare of our soldiers in this great war, and will aid materially in providing the twenty thousand doctors urgently needed for the National Army, in order that the men who fight the country's battles may receive adequate medical care.

THE RHODE ISLAND QUOTA OF PHYSICIANS.

There has been a good deal of erroneous comment made in the daily press and elsewhere upon the slowness shown on the part of the medical men in offering their services to the country, and misdirected zeal and hysteria have given rise in some places to a prophecy that a special conscription of physicians will be necessary to supply the quota of medical officers for the two fighting arms of the nation. Such statements are to be deplored, and yet the enlistment of physicians must be increased, as a sober consideration of the facts will convince every medical man. About 12,000 commissions in the Medical Reserve Corps have been issued and only 9,000 of these have been accepted by the applicants. This means that about 25 per cent. of those applying for commissions have for various reasons failed promptly to accept the honor which the Nation seeks to confer upon them. A glance at the Honor Roll appearing elsewhere in this issue shows what Rhode Island is doing in this regard, but according to an unofficial estimate we have furnished only a half of the quota of medical officers which those in authority at Washington expect from this State. We must have at least 100 physicians from Rhode Island pledged to the service of the country, and it cannot be urged with too great insistence that the men who have applied for and received commissions complete their patriotic duty by accepting them and not defer by reason of bad business habits. Moreover, there are many young physicians in the State to whom the prospect of an assured income ranging from $2,000 to $3,000 a year with subsistence would be alluring and in some cases a financial God-send, for much of this stipend can be saved, and the number of physicians who have been in practice five years and can show a savings account of yearly increments of a thousand dollars is unquestionably few.

The spirit of sacrifice has always been one of the shining and outstanding attributes of the medical profession, and it is unbelievable that now in this the greatest crisis through which our country is about to pass, the physicians will scrutinize too closely the loss of civil practice and monetary considerations. The Exemption Boards are instructed not to exempt conscripts on industrial grounds unless the applicant's services are indispensable, and the physician must for himself apply this acid test to his own condition and not be too much influenced by the prejudiced statements of his patients.

MEDICAL EXAMINATIONS AND MILITARY EXEMPTIONS.

Provost Marshal General Crowder in a recent statement has made it clear that the Examining Boards and Exemption Boards exist for the purpose of enrolling an army, not to excuse individuals from service. This is a lesson which should be taken to heart by every physician. The men on these Boards are performing a highly patriotic and, as usual, thankless task, and it behooves us to uphold their hands and to do nothing that will obstruct wrongfully the work of raising a fighting force. We, therefore, take this opportunity to impress upon the family physician that his duty to his country is a higher and nobler concept than his relation to the individual who is to-day his patient and to-morrow another's. It will be well, therefore, for us all to be most careful, circumspect and honest in subscribing to exemption pleas of conscripts who seek to evade service by magnifying minor defects or by malingering. On the contrary, it is our duty to endeavor by every means at our disposal to so correct defects of the feet, eyes, teeth, etc., that occur in drafted men as to restore them to that state of physical ability that they may serve their country and be better men. Hasty and ill-advised certificates of disability for trivial affections should not be given "embusqués" merely out of social or financial considerations.

BIOLOGY AND THE WAR.

Undoubtedly it would have surprised and pained the modest, mild-tempered Charles Darwin had he known that his "Origin of Species" was to become, in part at least, the inspiration and even the justification for some of the vilest acts in history. And yet it has happened so; for in the half century since the publication of that work a philosophy of biology has arisen which in its most ruthless form is now motivating the conduct of hundreds of thousands of Germans.

In spite of its poverty of ideas, its one-sidedness and that inability to discriminate which leads to erroneous conclusions and criminal acts, this biological view of human society, taught by the professors to the German people, is impelling them to cover with blood the fair face of Europe. Lucretius gave to the world ether, atoms and chance; Darwin, like a modern Lucretius, gave it Natural Selection: and if you wish to study an account of this philosophy of Natural Selection in action you may do so in Professor Vernon Kellogg's contribution to the current Atlantic Monthly. As Kellogg (a converted pacifist) truly remarks, it is a point of view that will never allow any land or people controlled by it to exist peacefully by the side of a people governed by our point of view. For the German doctrine does not permit of a live-and-let-live kind of carrying on. It is an attitude of mind that justifies itself by a whole-hearted acceptance of the worst of Neo-Darwinism, the *Allmacht* of Natural Selection applied rigorously to human life and society and *Kultur*. Man, according to the German gospel, has arisen from his primitive bestial condition through the action of Natural Selection, and Natural Selection depends for its working on a rigorous and ruthless struggle for existence. The battle is to the strong, and because the German is superior to other men he must survive even at the cost of the others' extermination. A pathetic myth, you will say, quite worthy of some paretic! But the sad thing about the business is that these German intellectuals really believe what they say—are even fighting and dying in the trenches for their belief. A man who dies for his philosophy is certainly in earnest about it. Is it then to be wondered at that a nation whose leaders of thought place themselves and their fellows at the biological level of the jungle should have no place in its scheme of life for those virtues so despised by Nietzsche when he admonished the wise man to close his ears, however fierce an effort it may require, to the voice of another's pain? Whatever may be now or in the future the military successes of Germany, her moral failure is complete. We say we are fighting to make the world safe for democracy,—and so indeed we are; but our young men in the trenches are fighting for something higher even that that. To make the world safe for spiritual ideals and values—that is what they are really fighting for.

THE CONTROL OF PULMONARY TUBERCULOSIS.

It takes many years for a new point of view on matters medical to spread from the clinics and laboratories where it is developed and become firmly fixed in the mind of the general practitioner. Again, many more years must elapse

before such an idea, which already will have become axiomatic, reaches the general public.

Fundamental ideas concerning the control of tuberculosis are now beginning to be appreciated by the average intelligent citizen, thanks to the widespread publicity that has been given to anti-tuberculosis work. The gradual process of education is being carried on by medical men everywhere and it will not be many years before the public will come to a sufficiently clear realization of the facts to cause a demand for more adequate community control of the disease. At present, however, there are still many people who will walk blocks to avoid passing a "pest house" where a leper is confined, but who live tranquilly at home in the house with one or more cases of "open" tuberculosis. When the public realizes that the "white plague" is more to be dreaded than leprosy, and can be contracted only from patients who have the disease, this fatalistic attitude will be abandoned. The passage of legislation which aims to segregate all patients who are discharging tubercle bacilli and will thus prevent them from infecting others, especially the children of the community, will be a long step forward. It is true that such legislation will interfere with the personal liberty of the patient, in the same way as the liberty of the person with scarlet fever is curtailed, and for the same reason. Individual liberty, however, must be sacrificed in the one case as in the other for the general good if real headway is to be made in combating the ravages of the bacillus of Koch.

SOCIETIES

RHODE ISLAND MEDICAL SOCIETY

(Continued from August)

Dr. F. N. Brown for the Committee on the Workmen's Compensation Act reported as follows:

"After rather a long period, I submit the final report of the committee appointed by Dr. John W. Keefe, when President of the Rhode Island Medical Society in 1914, to investigate, and, if possible, bring about a more equitable adjustment of the 'Workmen's Compensation Act.'

"It will be recalled that the original appointees were Drs. Richardson, Rogers, and myself—upon the resignation of the first two, Drs. J. E. Mowry and George A. Matteson were appointed to the vacancies.

"I will not dwell upon the great detail of missionary work done by this Committee in this and other states. Suffice it to say that tho many disappointments were met, a great deal of data and facts were assembled which were of much value subsequently.

"Of our efforts in the legislature last year that were somewhat unceremoniously brushed aside is a matter of regrettable history that was to be compensated for in days to come.

"Upon one of our members going to 'Somewhere in France' there was appointed, January 23, 1917, by our then President, Dr. Chesebro, to the augmentation of our Committee, Drs. T. J. Smith, Wm. L. Harris and J. Edgar Tanguay. With this added and able force we were able to convince our legislators of the justice of our contention and upon the 19th of April, the amendments, inspired by the Rhode Island Medical Society, were read into the laws of this state, to become operative June 1, 1917. Rhode Island stands, therefore, the pioneer of a great and just humanitarian principle; and the benediction of the law upon this principle places every physician in Rhode Island upon his honor and bids him 'play fair.'

"During the campaign that followed the appointment of this additional committee, circular letters, personal letters and post cards were sent to various medical and other organizations, legislators and to certain personages outside the legislature.

"*Personal* application was made to a great many men in the legislature and to many outside the legislature whose counsel might be of influence.

"A night journey was made to visit the District Society of Woonsocket to elucidate the proposed amendment. Close touch with affairs and constant vigilance were necessary at every turn, as within three days of the closing of the legislative session, private messages by telephone were sent to various senators, clothed in strong argument, though largely based upon economic reasons, from strong and influential interests, urging defeat of this proposed amendment with evident assurance that it would be defeated, for while it was evident for several days that a direct victory for our opponents could not be, mutilation of the act to an unacceptable point

was our constant menace, and it was not until 8 o'clock at night, upon the last day of the session, that we could say, 'We have met the enemy and they are ours.'

"It must be borne in mind, however, that this law is not of necessity a fixture, and it devolves largely upon our profession to see to it that the principles for which we have striven are not repealed in the next or subsequent sessions.

"As a matter of reference it may not be amiss to reiterate the salient medical points in this new law:

"The injured person is granted the right to select the physician. The length of time to which he is entitled to treatment is extended to 28 days, with compensation beginning upon the 15th as heretofore; if, however, disability extends beyond 28 days, compensation begins upon date of injury.

"The direct responsibility of the employer to the physician, or hospital, is also fixed—'Provided, however, that the physician or hospital shall give written notice to the employer within seven days after the beginning of their services that they have been so selected and shall present their claim to the employer for payment of such services within three months after the conclusion thereof, but failure of the employer to receive such notice shall not render the employee liable for such service.'

"Mr. Chairman and Gentlemen, there are some things in every enterprise that fail to greet the ear pleasantly—I am about to mention one—in the activities of this committee there were incurred certain expenses, vouchers for which are appended, which I venture to believe will meet with your favorable and immediate consideration:—we have also presumed to say that the contention of employers that many physicians charge very large fees has foundation in fact; as is known, persons injured in ordinary course of events often pay slowly, piecemeal, or not at all, whereas, with those injured, protected by insurance, payment is fairly prompt, and in a lump sum. It is recommended, therefore, that the minimum (consistent) fee in industrial accident cases be given our earnest consideration.

"It is further suggested that the Rhode Island Medical Society establish a Board of Censors for its own benefit and protection against accusation of unfairness, by which it may deal with and affix penalties for repeated offenses by members in our own ranks. It is also recommended that such portions of this report as may seem advisable be printed in THE RHODE ISLAND MEDICAL JOURNAL with special reference with that part which has to do with the recent amendment to the law, for reasons before stated. And in conclusion, in offering this report, occasion is taken to compliment the Society, as a whole, for so materially assisting in placing upon the statutes probably the best law for laboring humanity and for the medical profession that this state, or any other, has ever had, being paralleled only by the passing of the Medical Practice Act in 1895.

"We desire to express our appreciation of the conscientious work of Representative Eaton and also of the able and energetic efforts of Mr. Francis I. McCanna. We are, especially, appreciative of the silent forces within our own ranks so potently exhibited in high influential circles with those who were high enough and great enough to recognize in this law the immutable RIGHT of those who work; and we now only ask at your hands an honorable discharge."

On motion of the Secretary, duly seconded, a vote of thanks was extended to the Committee on Workmen's Compensation Act for their efficient work, and it was voted that the committee be discharged.

The following resolution, introduced by the Secretary, duly seconded, was passed: *Resolved,* That in case any member of the Rhode Island Medical Society be obliged to leave his practice for any war service, the members remaining at home shall carry on the practice of active members and return to the agent of the absentee 50 per cent. of the proceeds of the same, and, further, upon the return of the absentee shall not attend any of his patients for a period of six months without his consent and approval.

The Secretary proposed the following resolution:

Resolved, That the members of the Rhode Island Medical Society pledge themselves to furnish gratuitous medical service to indigent dependents of enlisted men upon proper certification of the need of such service by the local branch of the American Red Cross. Passed.

Dr. J. E. Mowry moved that the following resolution be adopted:

Resolved, That any member of the Rhode Island Medical Society who is obliged to leave the state for any war service shall be accorded

remission of his dues in the State Society during active service. Motion carried.

Dr. F. T. Rogers moved that the President and Vice-President be a committee to solicit funds to erect a second memorial tablet in memory of recently deceased members. It was so voted.

An invitation from the Board of Trustees of the Rhode Island Hospital for the Rhode Island Medical Society to hold its September meeting at the Rhode Island Hospital was read and, upon motion of Dr. Risk, duly seconded, was accepted.

A communication from the United States Employees' Compensation Commission, Washington, D. C., requesting the formulation of a minimum fee bill for reasonable medical and surgical services to be furnished employees of the United States was read. It was voted that Dr. J. E. Mowry, delegate to the American Medical Association, be instructed to ascertain informally the attitude of the American Medical Association and of other societies in regard to the matter.

Adjourned.

J. W. LEECH, M. D., *Secretary.*

ANNUAL MEETING OF THE COUNCIL.

The meeting was held on May 23, 1917, at the Medical Library. There were present Drs. Champlin, Welch, Leech, Risk, Rogers, Briggs, Hawkins, Howe, with the President, E. D. Chesebro, presiding in the chair.

The minutes of the previous meeting were read and approved. The Treasurer's report could not be presented by reason of the failure of the Auditors to examine the report. Upon motion of Dr. Welch, duly seconded, it was voted that after the Treasurer's accounts shall have been audited and found correct, they shall be published in THE RHODE ISLAND MEDICAL JOURNAL.

Adjourned.

J. W. LEECH, M. D., *Secretary.*

The Council was called to order at a special meeting immediately after adjournment of the House of Delegates, and it was voted to approve the recommendation of the House of Delegates that the Treasurer be authorized to pay the bills incurred by the Committee on the Workmen's Compensation Act amounting to $38.50.

Adjourned.

J. W. LEECH, M. D., *Secretary.*

ANNUAL MEETING, May 31, 1917, R. I. Medical Library, 4 P. M.

The meeting was called to order by the President, Dr. E. D. Chesebro. The records of the March meeting and of the annual meeting of the House of Delegates and the Council were read by the Secretary.

Dr. Halsey DeWolf, as Secretary for the Fiske Fund, announced that the prize of $200 for the best essay on the subject "The Role of the Teeth and Tonsils in Arthritis" had been awarded to Dr. Joseph F. Hawkins, Providence. The subject for competitive essays under the Fiske Fund for the year of 1917-1918 was announced to be "Medical Lessons of the War." Dr. DeWolf further reported that the Trustees of the Fiske Fund had donated their remuneration as Trustees to the Library Committee.

The Secretary reported that no award had been made under the terms of the Chase-Wiggin Fund and that this fund offers a prize of $50 for the best or worthy essay on "The Use of Tea and Coffee as Drinks." The fund stipulates that the essay will be expected to show that the constant and habitual use of either is injurious.

Dr. William H. Allen, Mansfield, Mass., was presented as Delegate from the Massachusetts Medical Society.

The following papers were read:

1. Case Report: "Retroperitoneal Sarcoma with Perforation of Duodenum," Drs. C. S. Christie and H. S. Bernstein.

2. Paper: "The Doctor in the Present War," Dr. J. W. Keefe. In the absence of Dr. Keefe, the paper was read by Dr. J. E. Donley.

3. Address, "Exophthalmic Goitre," Dr. David L. Edsall, Jackson Professor of Clinical Medicine, Harvard University.

4. Annual Address of the President, "Thirty Years in the Study and Practice of Medicine," Dr. E. D. Chesebro.

The President-elect, Dr. John Champlin, was presented to the meeting and assumed office. In accepting office, Dr. Champlin urged the formation of a permanent endowment fund to rid the Society of its financial burdens in connection with the Medical Library.

The meeting was then declared adjourned to meet informally for the annual banquet at the Narragansett Hotel, where Dr. A. T. Jones presided as Anniversary Chairman, and Dr. Edward Brush, of New York, was the speaker of the evening.

J. W. LEECH, M. D., *Secretary.*

DISTRICT SOCIETIES

WOONSOCKET DISTRICT SOCIETY.

The annual meeting of the Woonsocket District Society was held June 14, 1917. The following officers for the ensuing year were elected: President, Dr. W. W. Browne; 1st Vice-President, Dr. E. L. Myers; 2nd Vice-President, Dr. J. T. King; Secretary, Dr. E. F. Hamlin; Treasurer, Dr. R. G. Reed; Delegates to the Rhode Island Medical Society, Dr. Oscar Gilbert, Dr. Walter Rochleau; Councillor, Dr. E. D. Clarke; Censors, Dr. T. J. McLoughlin, Dr. A. Constantineau, Dr. E. N. Kingsbury.

E. F. HAMLIN, M. D., *Secretary.*

HOSPITALS

RHODE ISLAND HOSPITAL

Dr. George A. Eckert has entered the Medical Corps of the Navy.

Dr. Norman B. Cole expects to terminate his service at the hospital on September 1st. He will probably enter the Medical Corps of the Army.

Several men of the house staff have been examined for the draft.

PROVIDENCE CITY HOSPITAL.

The hospital has assumed charge of the clinic for children at the Federal Hill House. The staff in charge of this clinic consists of Dr. H. E. Utter, visiting physician, and Drs. W. P. Buffum, Jr., and G. T. Spicer, assistant visiting physicians.

Dr. Erle D. Forrest has been appointed assistant visiting physician to the Medical Out-patient Department.

Dr. H. G. Calder has been appointed assistant visiting physician to the Children's Out-patient Department.

Dr. R. S. Wilcox has accepted a commission as captain in the Officers' Reserve Corps of the Army, and is now at Fort Benjamin Harrison.

Mr. Chandley, pharmacist to the hospital, has recently joined the Hospital Corps of the Army.

ST. JOSEPH'S HOSPITAL.

Dr. James Hamilton, who is now on duty at Fort Oglethorpe, has been ordered to the Army Medical School at Washington.

Dr. T. F. Scanlan has accepted a commission as Captain in the Officers' Reserve Corps of the Army and is awaiting orders.

Dr. F. E. Croghan of the Medical Out-patient Department has accepted a commission as First Lieutenant in the Officers' Reserve Corps and has been ordered to active duty at Fort Benjamin Harrison.

The following men have been appointed to the Consulting Staff of the Hospital: Drs. T. J. McLaughlin and T. F. Kennedy of Woonsocket and James H. Haberlin of Providence.

MISCELLANEOUS

Dr. John F. McCusker has been designated consulting physician for diseases of the eye, ear, nose and throat in the United States Public Health Service, for the Port of Providence, by Surgeon General Rupert Blue.

Dr. Herbert Terry has removed his office from 97 Broad street to 224 Thayer street.

At the quarterly meeting of the Rhode Island Medical Society, to be held at the Rhode Island Hospital, September 6, 1917, officers of the Medical Reserve Corps will be present, prepared to examine any physicians who desire to enlist in the Medical Reserve Corps.